

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/092,095	03/06/2002	Brian Bates	8627-051	8504	
75	90 09/14/2005		EXAM	INER	
J. Matthew Buchanan			WEBB, SARAH K		
BRINKS HOFER GILSON & LIONE P.O. Box 10395			ART UNIT	PAPER NUMBER	
	Chicago, IL 60610				
			DATE MAILED: 09/14/200:	DATE MAILED: 09/14/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

The

	Application No.	Applicant(s)			
Office Action Comments	10/092,095	BATES, BRIAN			
Office Action Summary	Examiner	Art Unit			
	Sarah K. Webb	3731			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on 05 Ju	Responsive to communication(s) filed on <u>05 July 2005</u> .				
·— ·					
<i>,</i>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4) Claim(s) 40-72 is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>40-72</u> is/are rejected.					
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.				
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examiner.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)					
1) Notice of References Cited (P10-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 7/5/05.  4) Interview Summary (P10-413)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152)  Contact the province of References Cited (P10-892)  Paper No(s)/Mail Date					

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 40-47 and 51-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,080,191 to Summers in view of US Patent No. 5,951,599 to McCrory.

Summers discloses several stent patterns in Figures 1-5 and 21 that meet many limitations of the claims. The embodiment of the stent in Figures 1-5 is formed from a single wire (column 3, line 65), has ring segments joined by curved regions, and adjacent rings are interleaved. The embodiment in Figure 21 has a longitudinal support and is formed from a flat sheet of material. Summers states that a graft material may be attached to any of the disclosed stent frames to seal an aneurysm (column 11, lines 25-52), but Summers fails to state that the graft material only covers a portion of the stent circumference.

McCrory discloses another stent frame with a graft attached to it. As shown in Figure 2A, the graft (22) extends only a portion of the length and circumference of the frame. The graft extends at least ¼ of the circumference. The graft material is an impermeable polymer that is attached to the frame by various attachment means (column 4, lines 14-19) and is intended for sealing an aneurysm. McCrory teaches that this particular configuration of the graft material allows the blood to flow through the apertures of the stent except at the neck of the aneurysm, where thrombosis is desired (column 3, lines 1-22). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a partial circumference graft on

Application/Control Number: 10/092,095

Art Unit: 3731

the Summers stent frame, as McCrory teaches that this configuration allows blood to flow through the stent frame apertures except at the site of the aneurysm sac. This configuration effectively seals the aneurysm without significantly affecting the flow of blood to other areas of the vessel.

Page 3

2. Claims 48,50,59,61-70, and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Summers in view of McCrory, as applied above, and further in view of US Patent No. 5,667,523 to Bynon et al.

McCrory and Summers fail to state how the graft is attached to the stent, but McCrory does state that any suitable mechanism for attaching a graft material to a stent frame may be used (column 4, lines 15-18). Bynon discloses another type of stent with a graft material attached to the frame. Bynon teaches that folding the graft material over threads of the stent results in an attachment that does not require sutures, which can cause tears or holes (column 4, line 60 - column 5, line 7 and column 8, lines 13-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to attach the graft of the modified Summers device by folding it over a frame thread, as Bynon teaches that this means for attaching a graft to a stent avoids common problems associated with suture attachment.

3. Claims 49, 60, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Summers in view of McCrory and Bynon, as applied above, and further in view of US Patent App. Pub. No. 2003/0139802 (Wulfman et al.).

McCrory and Summers fail to form the partial circumference graft to extend the full length of the stent. Wulfman discloses another stent frame that includes a graft

irregularities.

(28) is disposed over approximately ½ of the circumference of the frame (26). Similar to McCrory and Summers, the graft material (28) is also an impermeable polymer material that is attached to the frame by various attachment means (0033). Wulfman teaches that a partial circumference graft can extend the full length of the stent as an alternative to a partial length of the stent [0029]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the graft of the modified Summers device to extend the full length of the stent, as Wulfman teaches that this simple modification allows the device to be adapted for various types of vessel

Page 4

## Response to Arguments

4. Applicant's arguments with respect to the 102 rejections under McCrory and Wulfman have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and

Application/Control Number: 10/092,095 Page 5

Art Unit: 3731

any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah K. Webb whose telephone number is (571) 272-4706. The examiner can normally be reached on Mon-Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SKW JW 9/9/05 JW Juhan M. Moo

JULIAN W. WOO